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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,921	06/20/2003	Louis J. Wardlaw III	002663/030490	6235

7590 03/08/2006

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EXAMINER

WEST, PAUL M

ART UNIT PAPER NUMBER

2856

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

A

Office Action Summary	Application No. 10/600,921	Applicant(s) WARDLAW, LOUIS J.	
	Examiner Paul M. West	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wardlaw, III (4,596,135) in view of Henry.
2. As to claims 1-3, Wardlaw teaches a method of detecting flaws in a weld, comprising: connecting a source 40 of pressurized gas composition to an injection port 28 in a wellhead 10 in fluid communication with the weld 22,24, said composition comprising a gas mixture including a marker sub-composition comprising a hydrocarbon (Col. 3, lines 60-66); injecting said pressurized gas composition through the injection port while the weld is at an elevated temperature (Col. 4, lines 10-16); monitoring the source of pressurized gas composition for detecting losses in pressure (Col. 4, lines 16-18); and passing a marker gas detector probe 50 over the weld for detecting the marker gas leaking through the weld (Col. 4, lines 21-24). Wardlaw does not teach the marker sub-composition hydrocarbon being non chlorine-containing. Henry teaches a method of detecting leaks by detecting traces of a composition comprising 1,1,1,2-tetrafluoroethane (Col. 2, lines 58-60) in gaseous form (Col. 3, lines 5-6), which is a non chlorine-containing hydrocarbon. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Henry with the method of

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Wardlaw because, as Henry teaches, use of chlorine-containing hydrocarbons or Refrigerant 12 causes damage to the ozone layer.

3. As to claim 4, Wardlaw teaches fluid communication being established between the pressurized gas composition and the weld while the temperature of the wellhead is at substantially 500 degrees F (Col. 3, lines 22-23; Col. 4, lines 10-13).

4. As to claims 5-8, Wardlaw teaches a system for detecting flaws in a weld, comprising: a source 40 of pressurized gas composition for connection to a wellhead injection port 28 establishing fluid communication between the source of pressurized gas composition and the weld 22,24; a gas detector probe 50 for detecting a hydrocarbon gas leaking through the weld; and wherein fluid communication is established between the pressurized gas composition and the weld while the weld is maintained at an elevated temperature for detecting flaws in the weld at the elevated temperature (Col. 4, lines 10-15). Wardlaw does not teach the probe detecting a non chlorine-containing hydrocarbon. Henry teaches a system for detecting leaks by using an ultra-violet light probe (Col. 3, lines 32-33) to detect traces of a composition comprising 1,1,1,2-tetrafluoroethane (Col. 2, lines 58-60) in gaseous form (Col. 3, lines 5-6), which is a non chlorine-containing hydrocarbon. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Henry with the method of Wardlaw because, as Henry teaches, use of chlorine-containing hydrocarbons or Refrigerant 12 causes damage to the ozone layer.

Response to Arguments

5. Applicant's arguments filed 18 January 2006 have been fully considered but they are not persuasive.

6. In response to applicant's argument that the Henry reference is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Henry reference is pertinent to the problem of finding a useful marker composition that does not contain refrigerant 12, which can be used in a gas.

7. In response to Applicant's argument that Henry does not teach the marker composition being only a non-chlorine containing gas, Applicant has not claimed the marker composition being **only** a non-chlorine containing gas. What is claimed is a step of using a gas mixture which includes a sub-composition comprising a non-chlorine containing hydrocarbon. Henry does teach the marker composition being incorporated into a gas (Col. 3, lines 4-6).

8. In response to Applicant's argument that Henry's method is for use at low temperatures, the Henry reference discloses one of the advantages of the marker composition is that it is extremely stable at much higher temperatures of substantially 500°F (Col. 2, lines 55-57).

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul M. West whose telephone number is (571) 272-8590. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Hezron A. Williams", with a long, sweeping horizontal line extending to the right.

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800